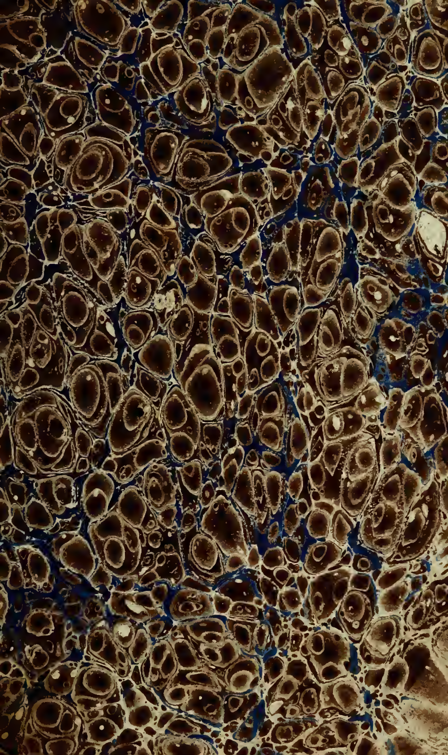

Hist.
QD28
828G
Atlas


Harvey Cushing



TRAITÉ PRATIQUE

DE CHIMIE.

IMPRIMERIE DE A. FIRMIN DIDOT,
RUE JACOB, N° 24.

TRAITÉ PRATIQUE

DE CHIMIE

APPLIQUÉE AUX ARTS ET MANUFACTURES, A L'HYGIÈNE ET A L'ÉCONOMIE DOMESTIQUE,

PAR S. F. GRAY;

TRADUIT DE L'ANGLAIS, CONSIDÉRABLEMENT AUGMENTÉ, ET MIS EN HARMONIE AVEC NOS BESOINS, NOS USAGES, OU LES MATIÈRES QUE NOUS POUVONS EMPLOYER.

ACCOMPAGNÉ DE 100 PLANCHES.

PAR T. RICHARD.

Atlas.



PARIS,

CHEZ ANSELIN, SUCCESSEUR DE MAGIMEL,
LIBRAIRE DE LA GARDE ROYALE ET DES TROUPES DE TOUTES ARMES,
RUE DAUPHINE, N° 9.

1829.

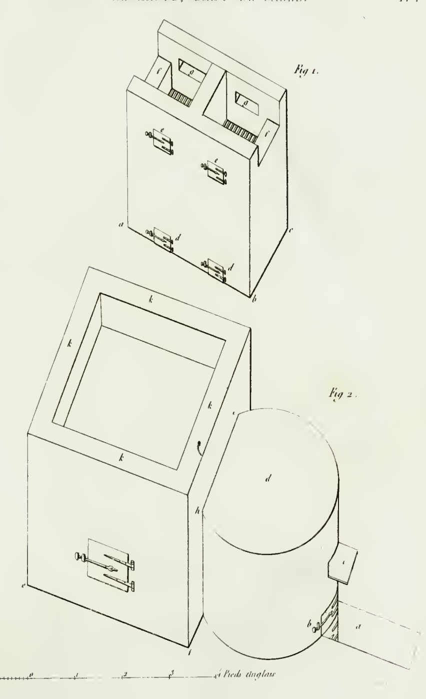

Fig. 1.
f
g
g
f
e
e
a
d
d
c
b
k
k
k
k
Fig. 2.
c
d
h
i
e
b
a
f
0
1
2
3
4 Pieds anglais

Fig 3

Fig 5

Fig 4

Fig 6

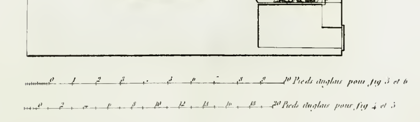
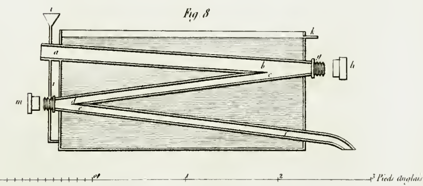
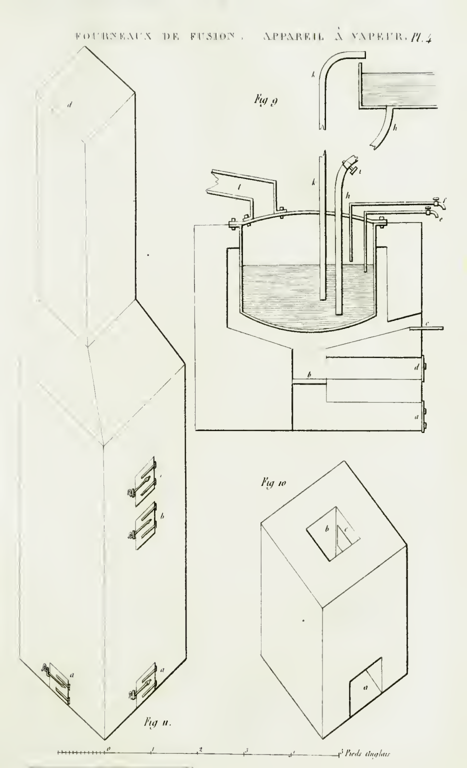


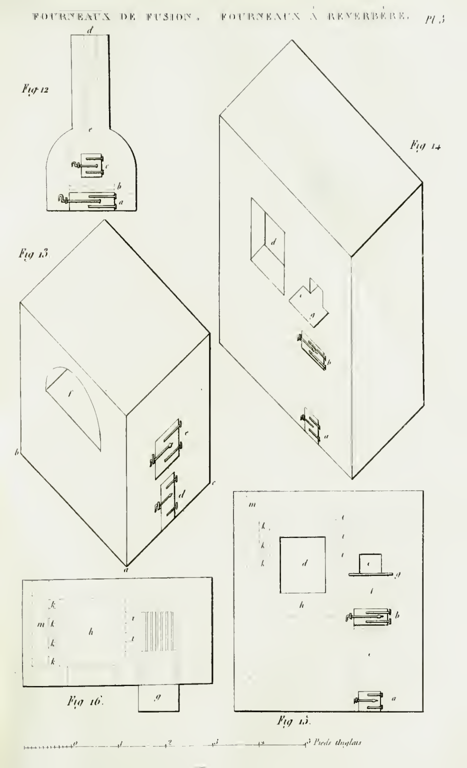
Fig. 7.

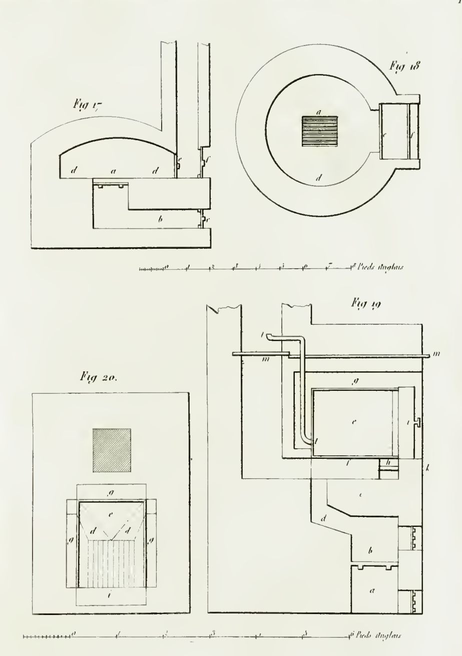
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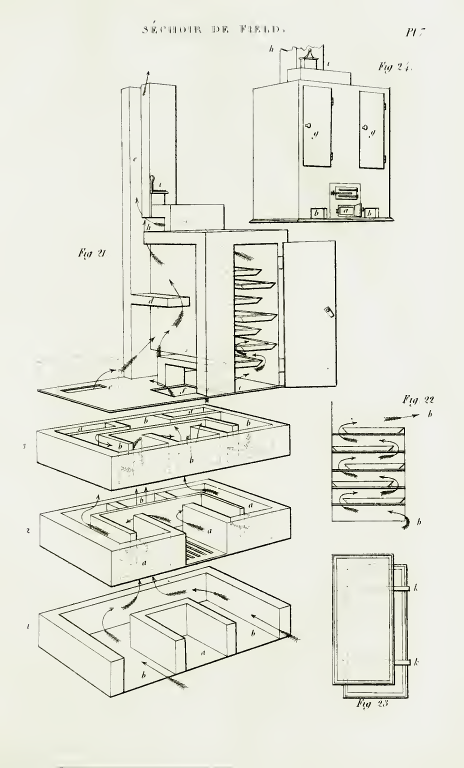
0 1 2 3 4 5 Pieds anglais.



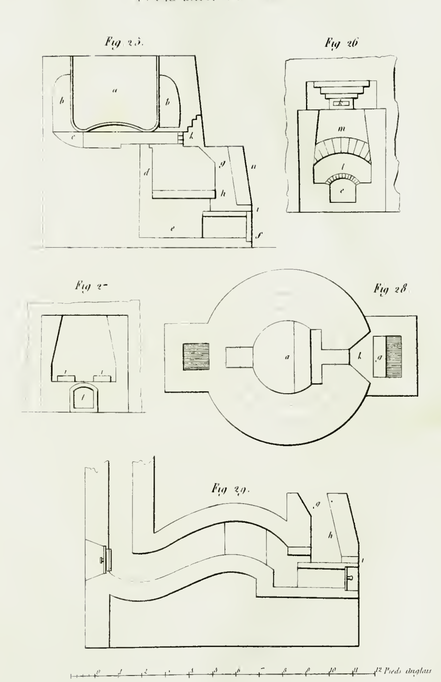

Fig 9
k
h
l
i
f
e
c
d
b
a
Fig 10
b
c
a
Fig 11.
d
c
b
a
a
0
1
2
3
4
5 Pieds anglais


Fig 12
Fig 13
Fig 14
Fig 15
Fig 16
0 1 2 3 4 5 Pieds Anglais


Fig 17
Fig 18
8 Pieds anglais
Fig 19
Fig 20.
6 Pieds anglais


Fig 24.
h
i
g
g
a
b
b
Fig 21.
e
i
h
d
c
f
Fig 22
b
b
3
a
d
b
b
b
b
2
a
a
a
b
1
a
b
b
k
k
Fig 23




Fig 25.
a
b
b
c
k
d
g
u
h
i
e
f
Fig 26
k
m
l
e
Fig 27
i
i
f
Fig 28.
a
k
g
Fig 29.
g
h
i
12 Pieds anglais

Pl 1.

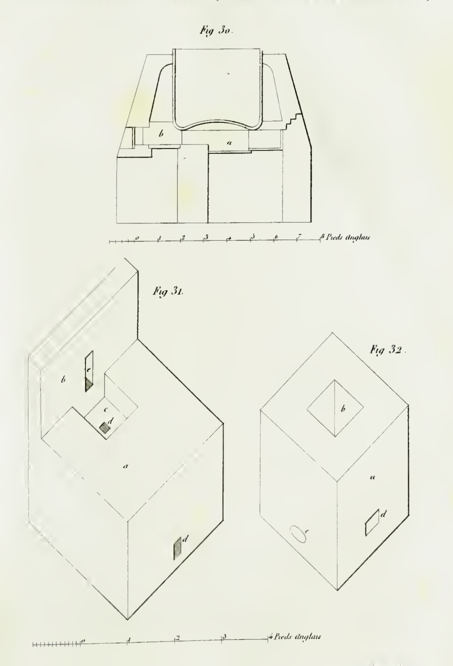
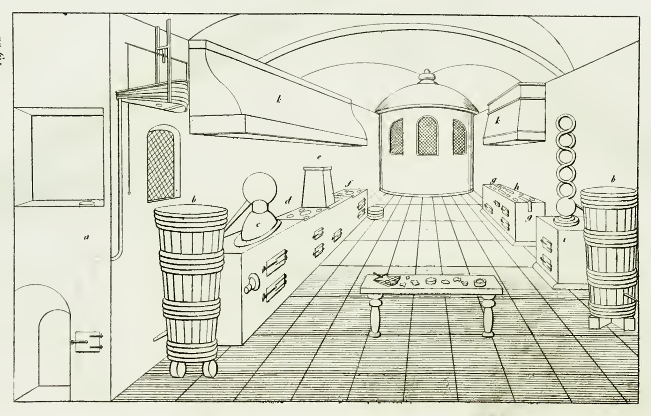
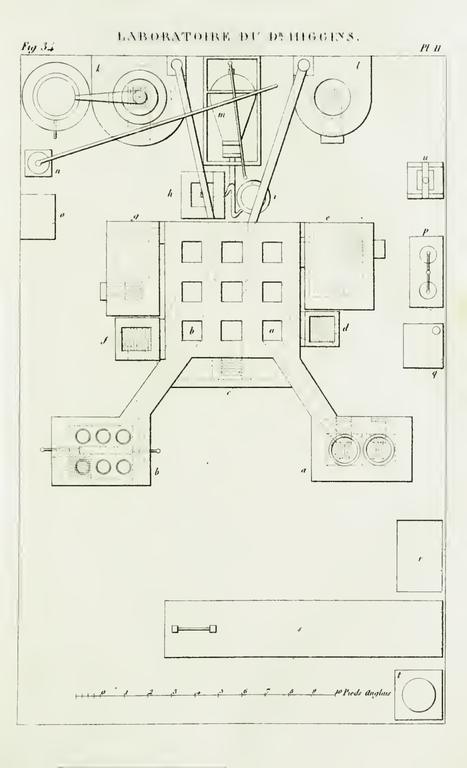

Fig 30.
a
b
0 1 2 3 4 5 6 7 8 Pieds Anglais
Fig 31.
a
b
c
d
e
d
Fig 32.
a
b
c
d
0 1 2 3 4 Pieds Anglais

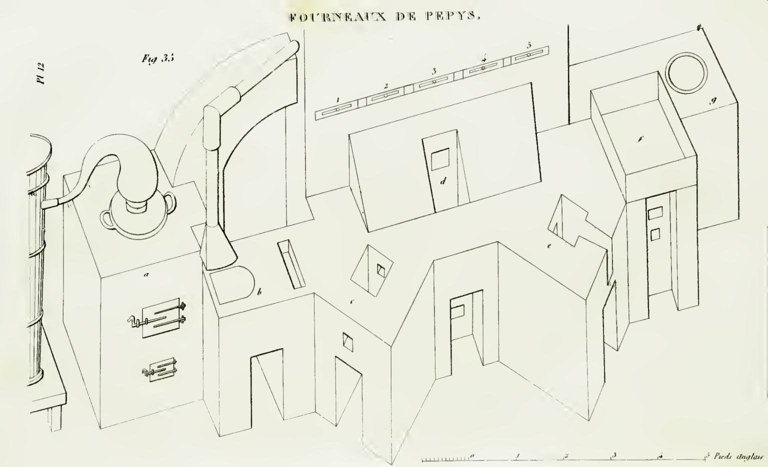
Fig 33

LABORATOIRE DE L'UNIVERSITÉ D'UTRECHT.



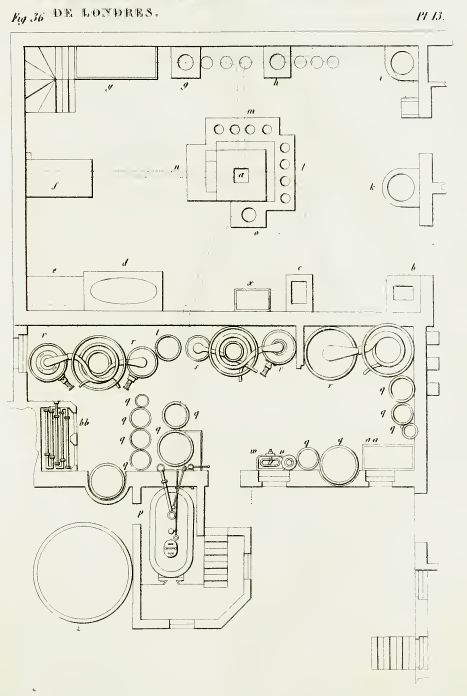

LABORATOIRE DU Dr. HIGGINS.
Fig 34
Pl II
k
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6
7
8
9
10 Pieds Anglais

FOURNEAUX DE PEPYS.



LABORATOIRE DE LA SOCIÉTÉ DES APOTHICAIRES DE LONDRES.

Fig 36 *Pl 13.*



FOURNEAUX DE M.R THENARD.

Fig. 37.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 Pieds anglais

FOURNEAUX PORTATIFS ANGLAIS.

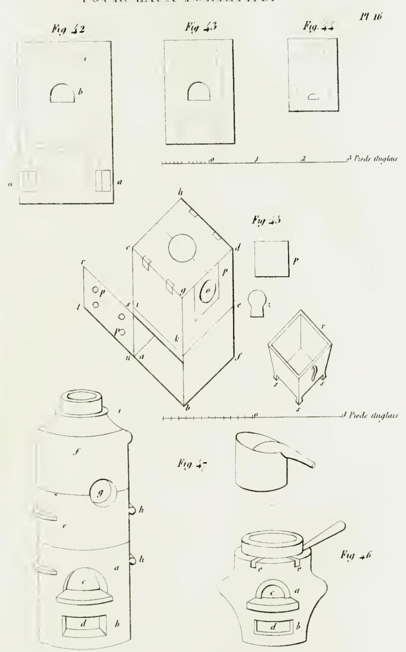


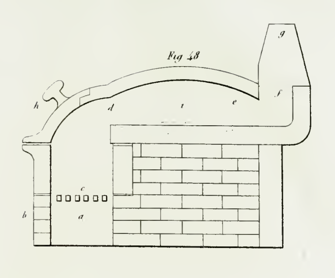
Fig 38

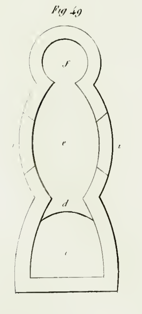
Fig 39

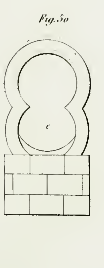
Fig 40

Fig 41

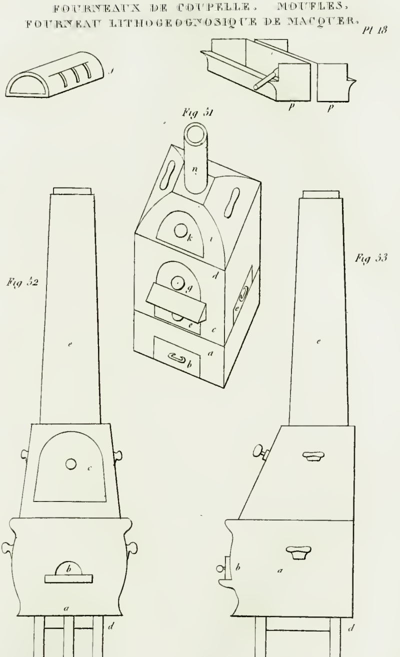

Fig 42
Fig 43
Fig. 44
Fig 45
Fig 46
Fig 47
3 Pieds Anglais
4 Pieds Anglais



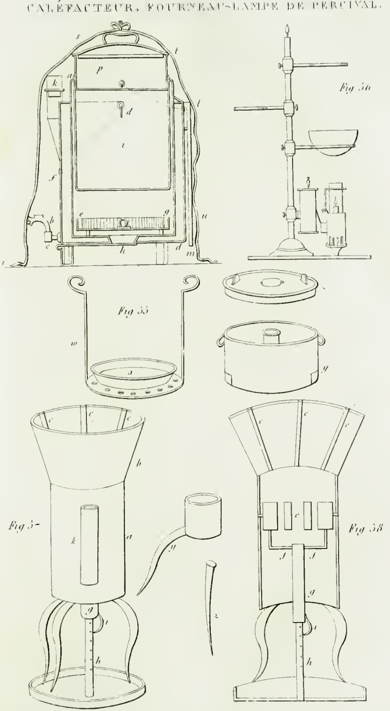




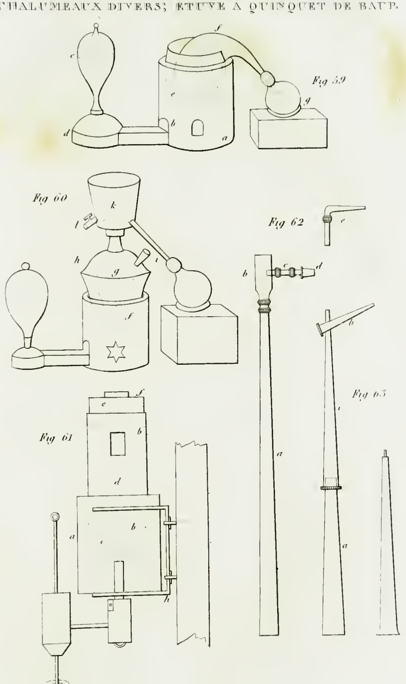
0 1 2 3 Pieds anglais

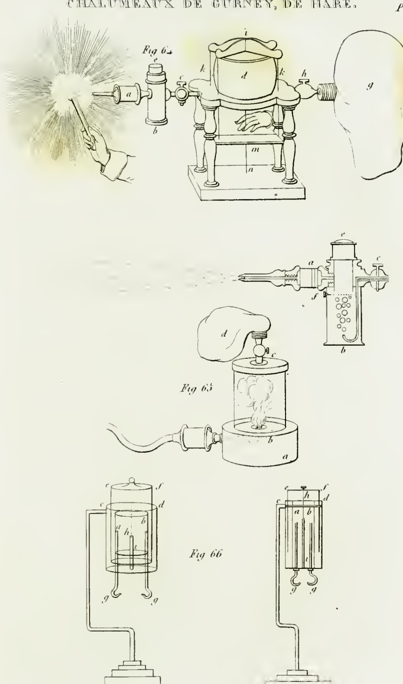

FOURNEAUX DE COUPELLE, MOUFLES,
FOURNEAU LITHOGEOGNOSIQUE DE MACQUER.
Pl 18
Fig 51
Fig 52
Fig 53
3 Pieds Anglais

CALÉFACTEUR, FOURNEAU-LAMPE DE PERCIVAL.

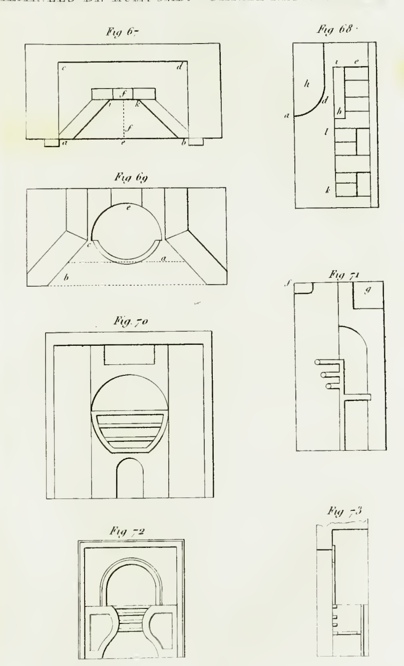


FOURNEAU-LAMPE DE BAUMÉ;
CHALUMEAUX DIVERS; ETUVE À QUINQUET DE BAUP.

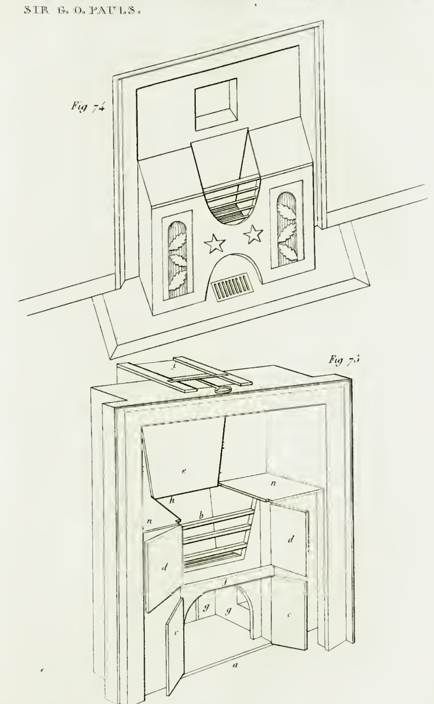



Fig 64
e
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c
Fig 65
b
a
c
f
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c
a
b
h
i
g
g
Fig 66
e
f
c
d
h
a
b
i
g
g

CHEMINÉES DE RUMFORD. CHEMINÉES IRLANDAISES.



CHEMINÉE DU STAFFORDSHIRE. CHEMINÉE-POÊLE DE SIR G. O. PAULS.



POËLES DU NORD DE L'EUROPE.

Fig 78

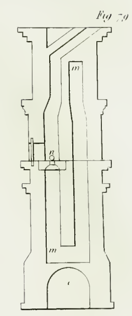


Fig 79

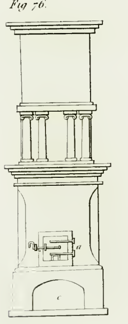


Fig 76.

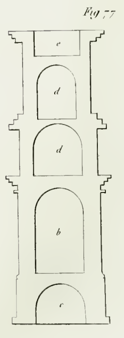
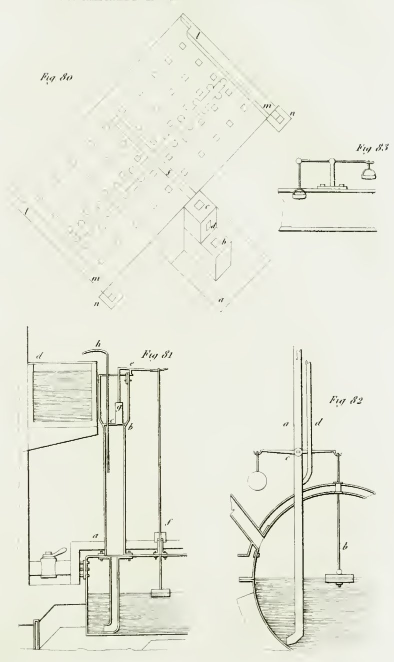
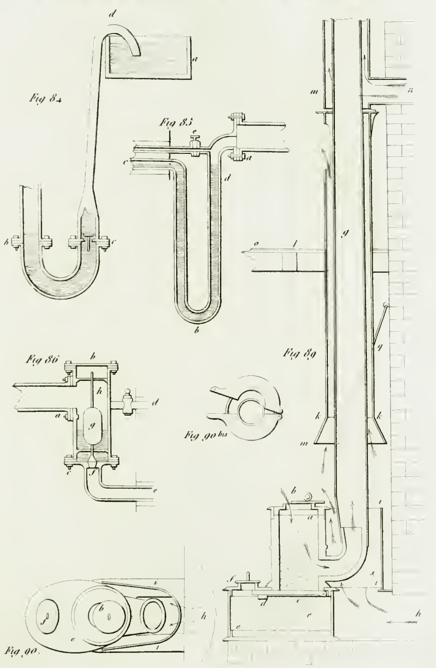


Fig 77

CONDUITS DE CHALEUR DES CHINOIS.
APPAREILS À VAPEUR.



APPAREILS À VAPEUR. POËLE DE PERKINS.



POÊLE DIT COCKLE.

Fig. 87

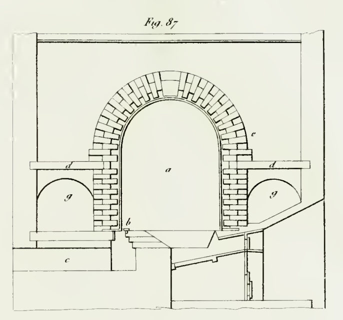
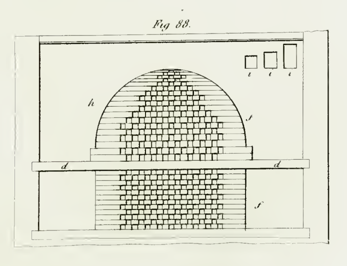
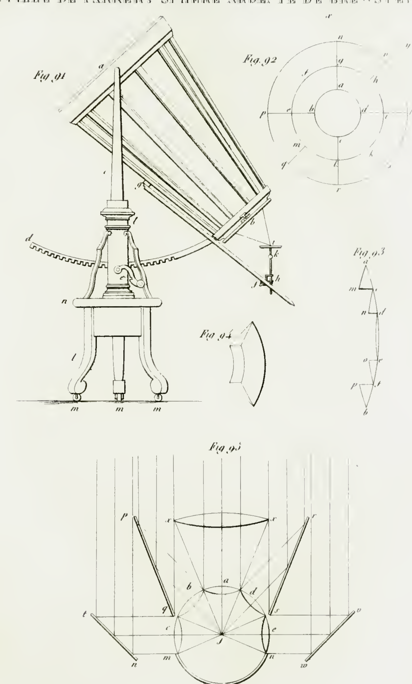
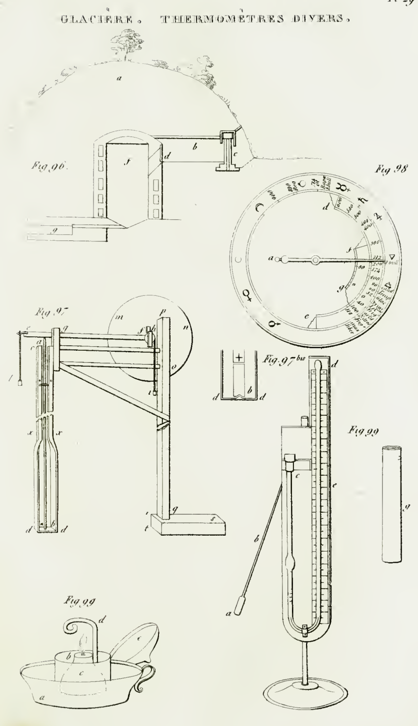


Fig 88.

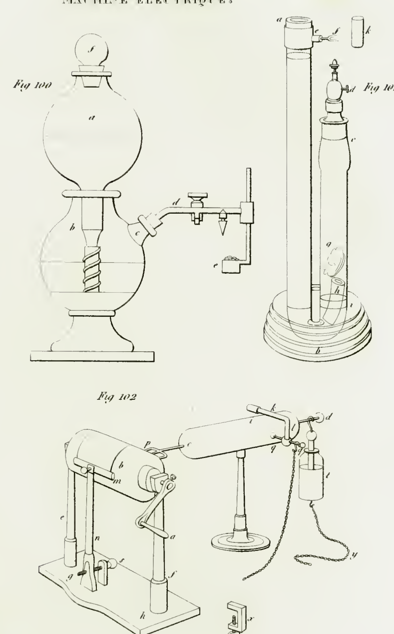


LENTILLE DE PARKER, SPHÈRE ARDENTE DE BREWSTER.

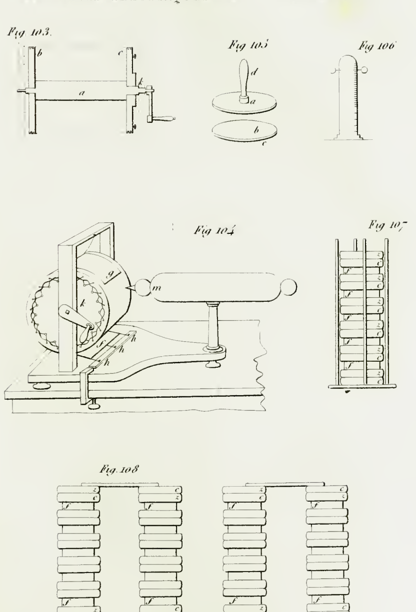



Pl 29
GLACIÈRE. THERMOMÈTRES DIVERS.
Fig. 96.
Fig. 98
Fig. 97
Fig. 97 bis
Fig. 99
Fig. 99

LAMPES DE DOBEREINER, DU Dr. FYFE.
MACHINE ELECTRIQUE.



APPAREILS ÉLECTRIQUES. PILE À COLONNES.



BATTERIES GALVANIQUES. CALORIMOTEUR DE HARE.

Fig. 109

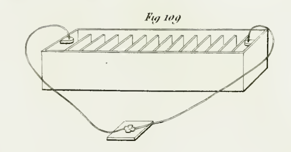


Fig. 110.

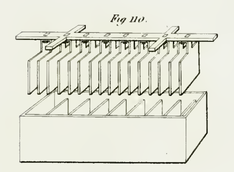


Fig. 111

Fig. 112

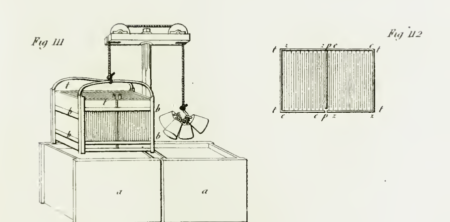


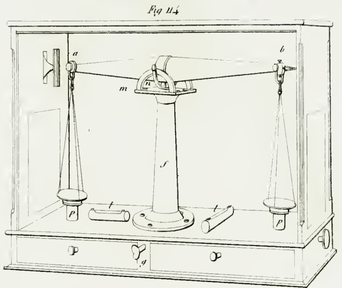


Fig 113

DÉFLAGRATEUR GALVANIQUE DE HARE,

BALANCES CHIMIQUES.

Fig. 114.



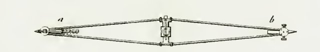
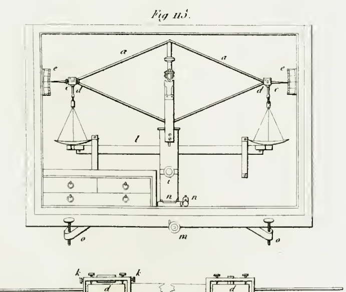
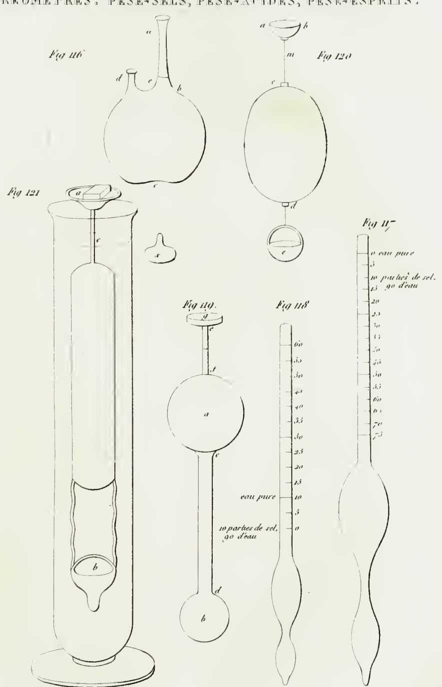


Fig. 115.



ARÉOMÈTRES, PÈSE-SELS, PÈSE-ACIDES, PÈSE-ESPRITS.



APPAREILS DE PULVÉRISATION.

Fig. 122

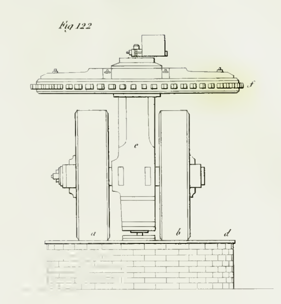
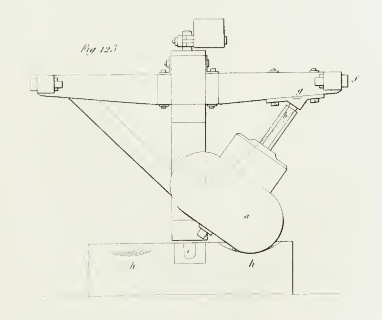


Fig. 123



APPAREILS DE PULVÉRISATION.
MOULIN À BOULETS ROULANS.

Fig. 124.

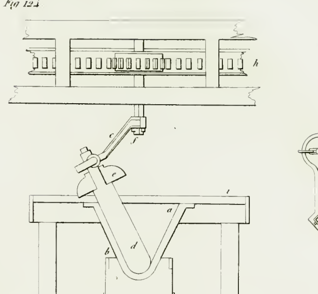
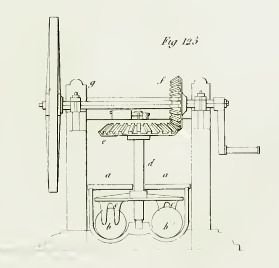
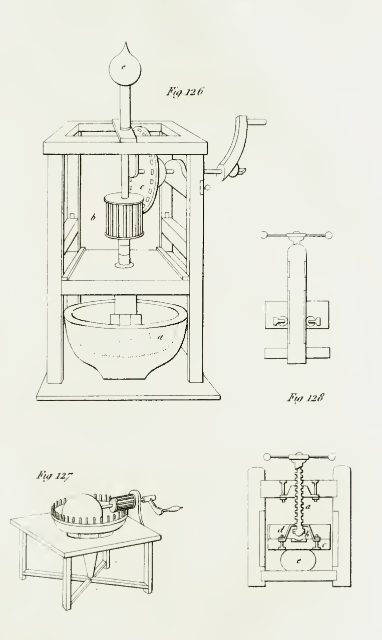




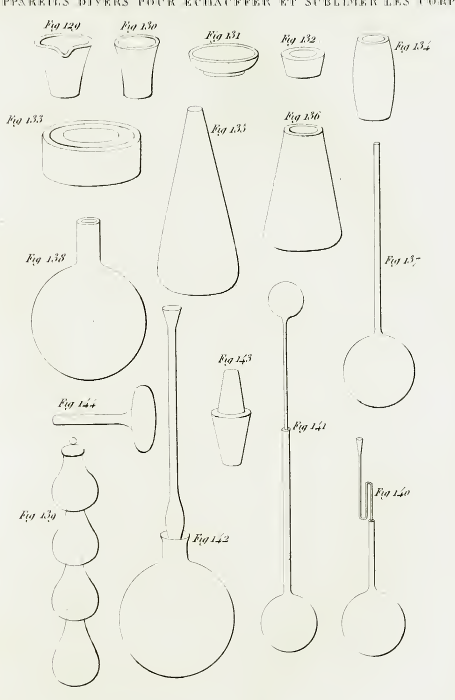
Fig. 125.



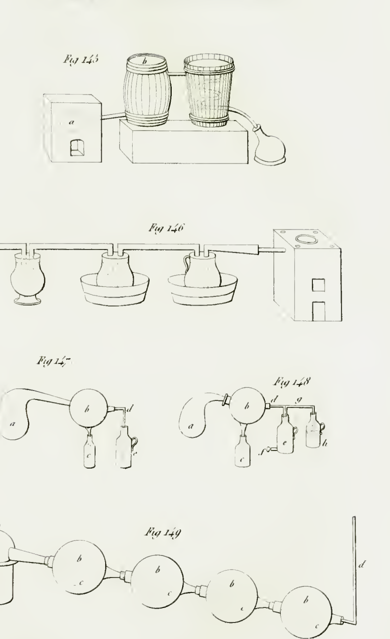
APPAREILS DE TRITURATION. PRESSOIR DE FIELDS.



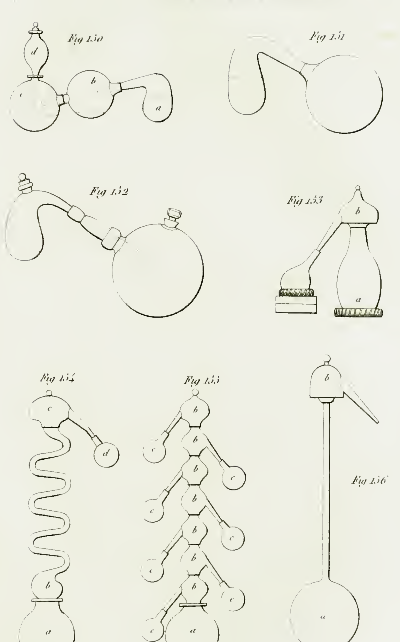
APPAREILS DIVERS POUR ÉCHAUFFER ET SUBLIMER LES CORPS.



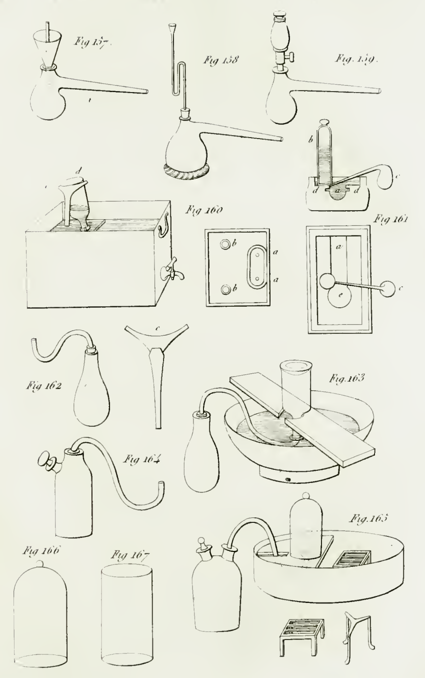
APPAREILS DE GLAUBER, DE WOULF.



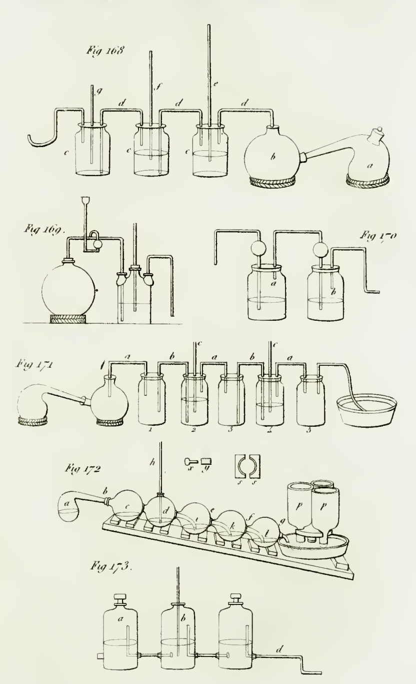
APPAREILS DIVERS DE DISTILLATION.



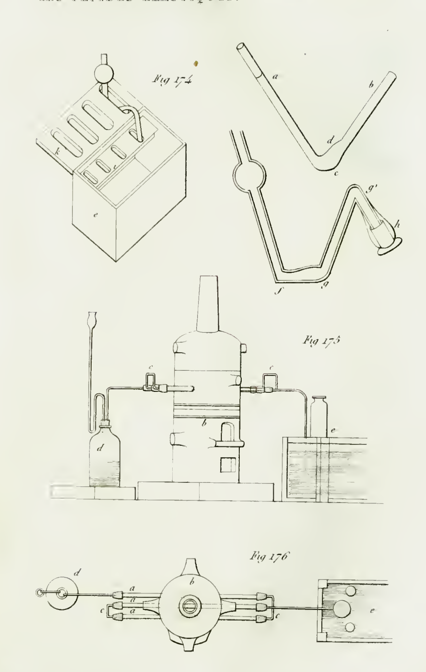
APPAREILS DE REMPLISSAGE, APPAREILS POUR LES GAZ.



APPAREILS POUR L'ABSORPTION DES VAPEURS.



TUBES DE KERR. APPAREILS POUR ÉCHAUFFER. LES FLUIDES ÉLASTIQUES.



APPAREILS POUR L'ANALYSE DES SUBSTANCES ORGANIQUES.

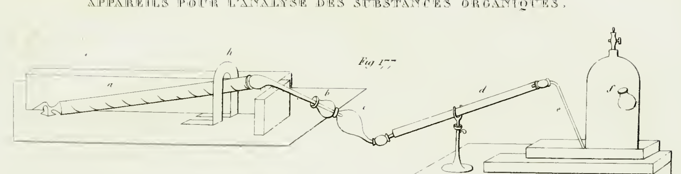


Fig 177

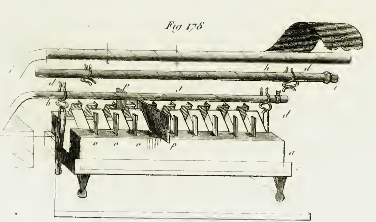


Fig 178

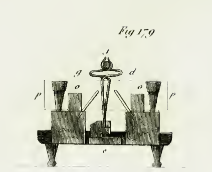
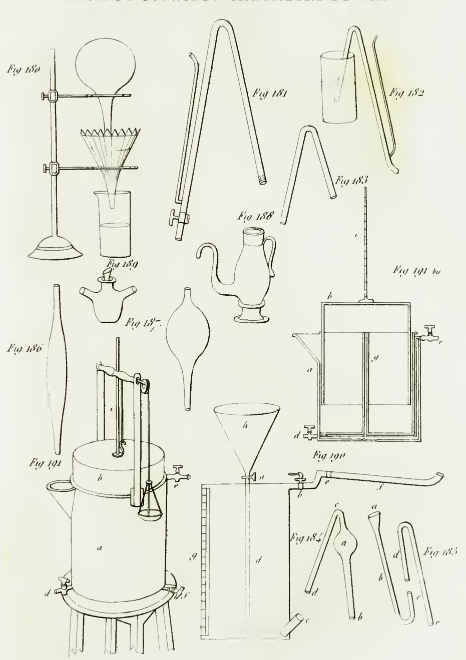
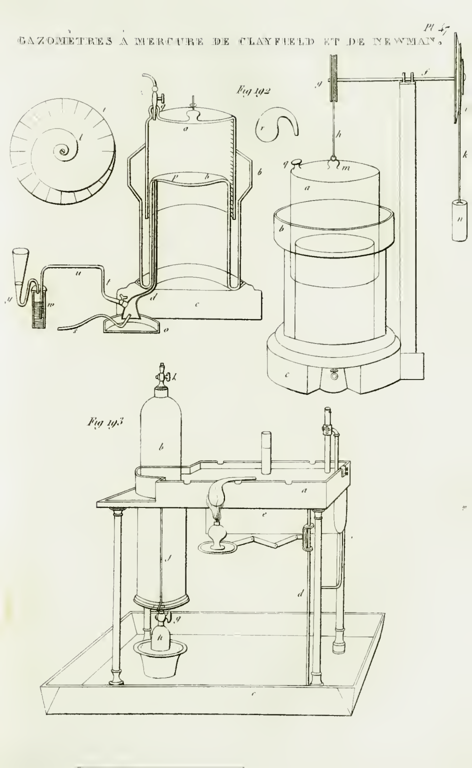


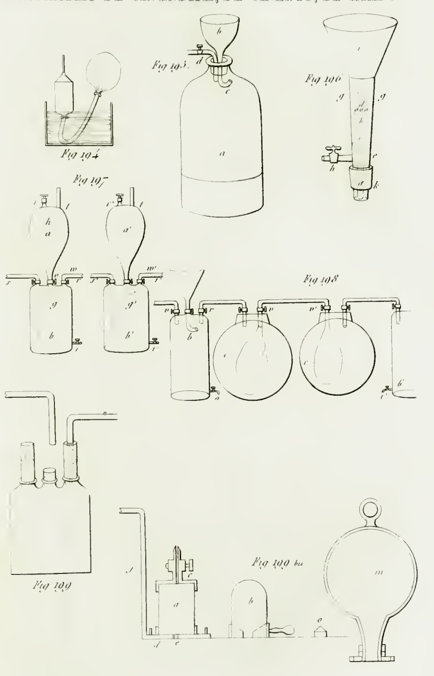
Fig 179

FILTRES, SYPHONS. GAZOMÈTRE DE WATT.

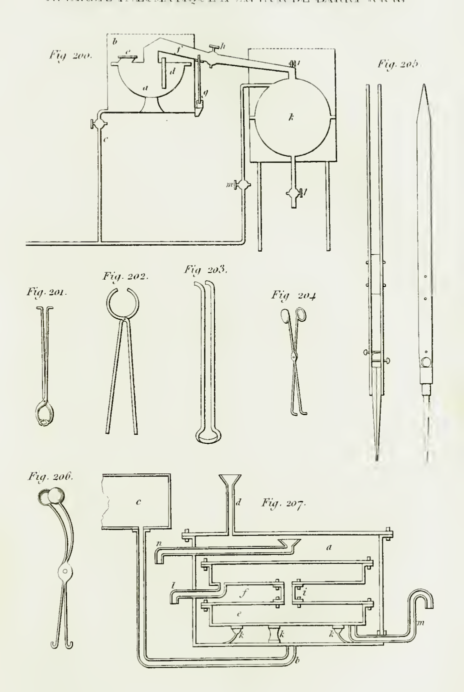



Pl. 47
GAZOMÈTRES À MERCURE DE CLAYFIELD ET DE NEWMAN.
Fig. 192
Fig. 193

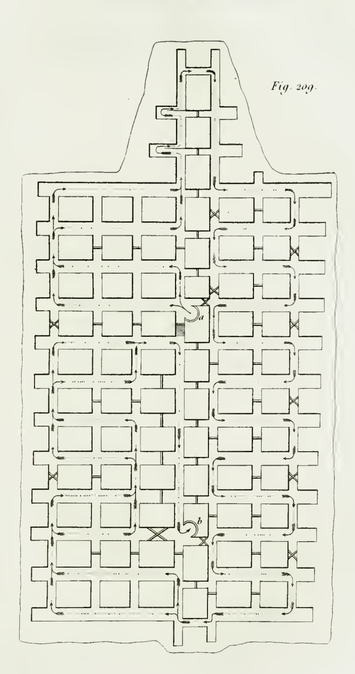
APPAREILS DE CAVENDISH, DE CAVALLO, DE READ.



APPAREIL PNEUMATIQUE À VAPEUR DE BARRY &c. &c. &c.

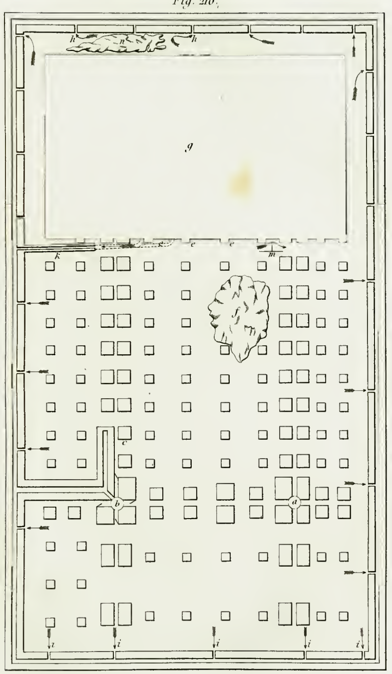


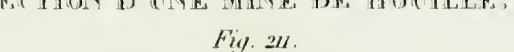
AIRAGE D'UNE MINE DE HOUILLE.



SYSTÈME D'AIRAGE DE RYAN,

Fig. 210.

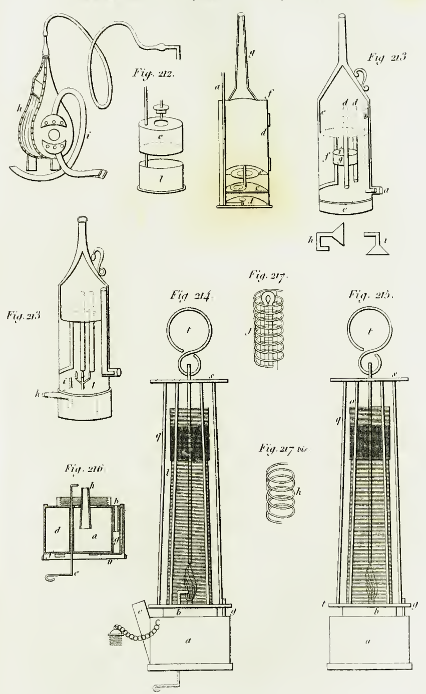




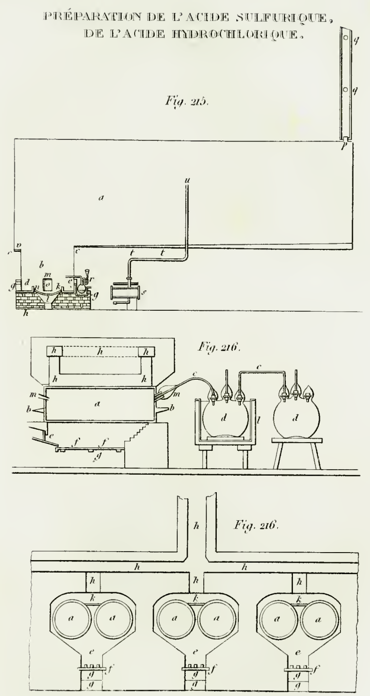
SECTION D'UNE MINE DE HOUILLE.

Fig. 211.

LAMPES DE SÛRETÉ, DE CLANNY, DE DAVY.



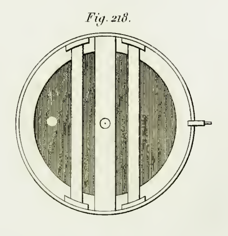
PRÉPARATION DE L'ACIDE SULFURIQUE, DE L'ACIDE HYDROCHLORIQUE.



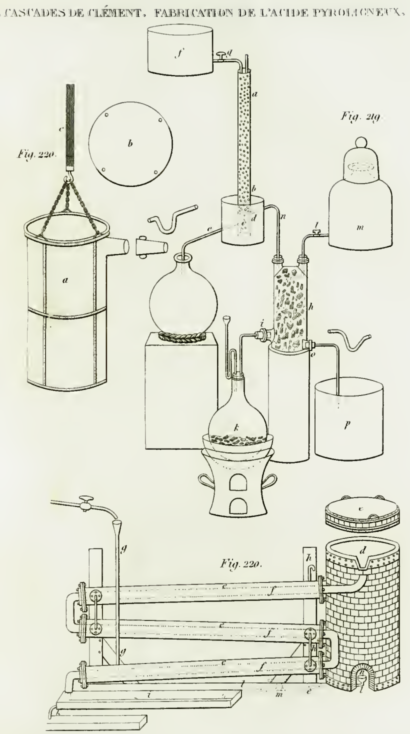
PRÉPARATION DE L'ACIDE CHLORIQUE.

Fig. 217.

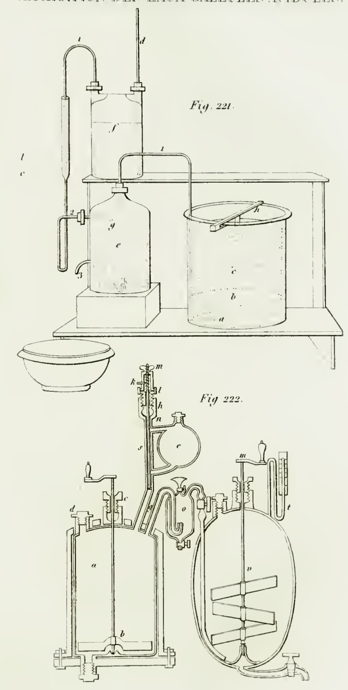
Fig. 218.



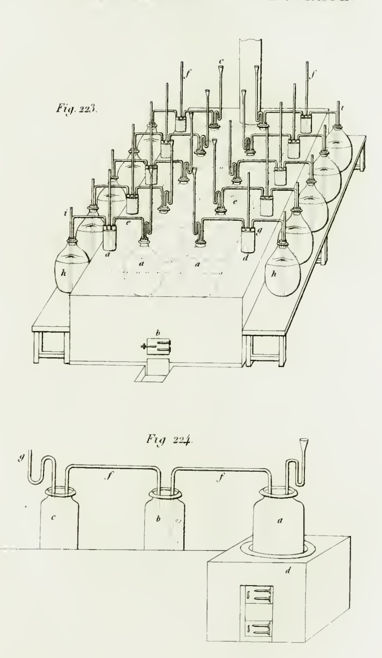
CASCADES DE CLÉMENT. FABRICATION DE L'ACIDE PYROLIGNEUX.



PRÉPARATION DES EAUX GAZEUZES ACIDULES.



PRÉPARATION DU CHLORATE DE POTASSE.

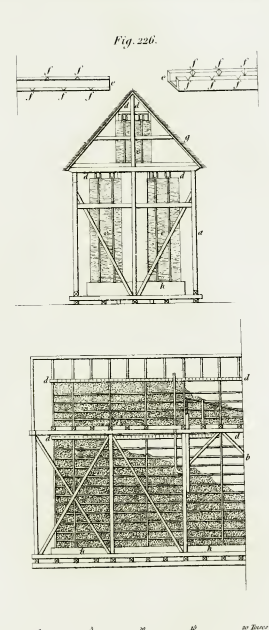


MINE DE SEL À VISACHNA.



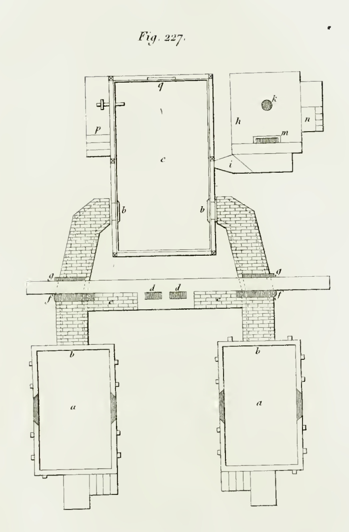
Fig. 225.

BÂTIMENT DE GRADUATION À BEX.



FABRICATION DU SEL AMMONIAC.

Fig. 227.



FOURS À CHAUX.

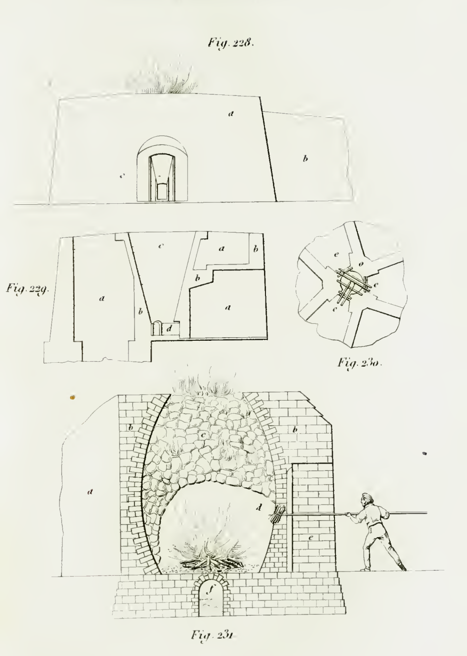
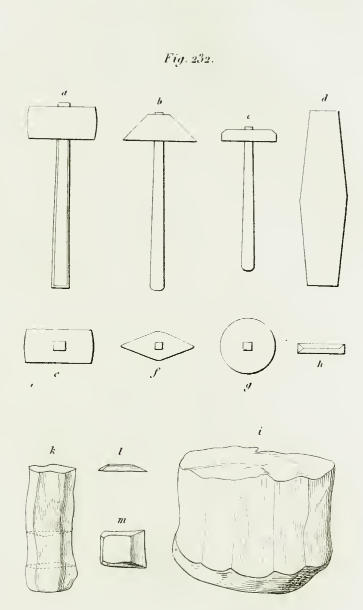


Fig. 231.

TAILLE DES PIERRES À FUSIL.

Fig. 232.



FABRICATION DU VERRE.

Bouteilles - Crown Glass.

Fig. 233.

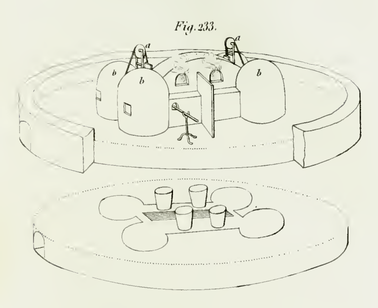
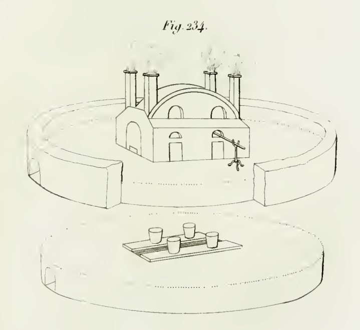
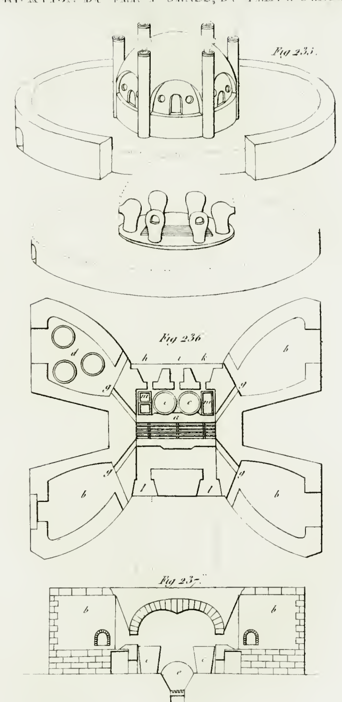
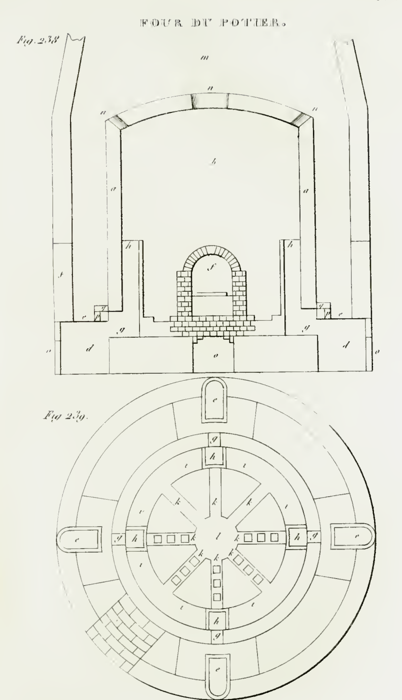


Fig. 234.




Fig 235.
Fig 236
d
h
i
k
b
g
g
m
c
c
m
a
g
g
l
l
b
b
Fig 237.
b
b
c
c
e

FOUR DU POTIER.



FOUR À POTERIES DE LA THURINGE.

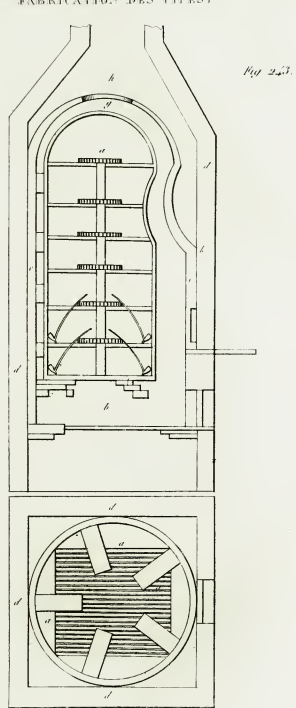
Fig 240

Fig 241

Fig 242

p q g h c b o n r m k l i j e a d f u

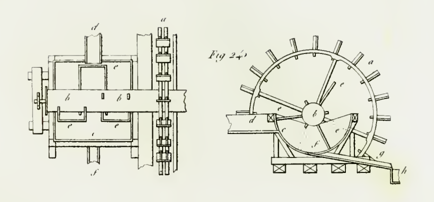
FABRICATION DES PIPES.



SECTION DE MINE.



ROUE À PALETTES, BOCARDS.



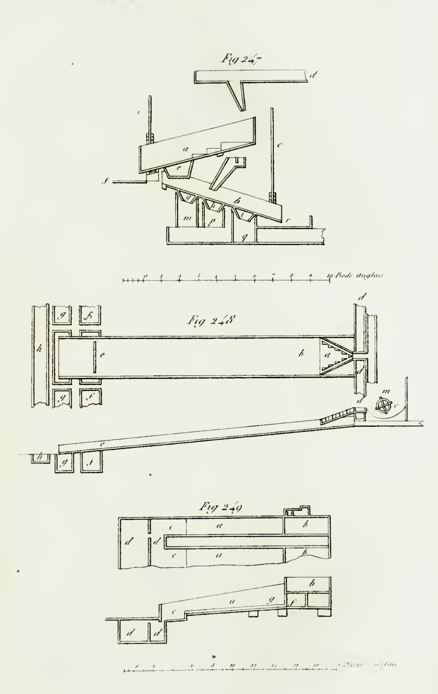
0 2 4 6 8 10 12 14 16 18 20 Pieds anglais

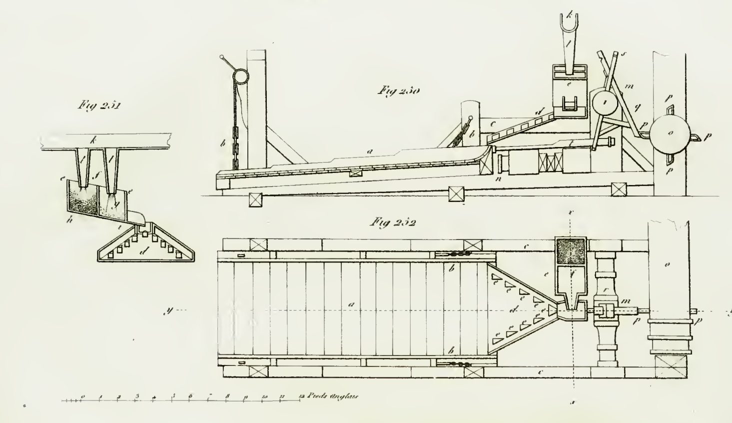
Fig 246

a
d d
d d
m
c
f
c
c
c
b
n
l
k
e
i
k

0 1 2 3 4 5 6 7 8 9 10 Pieds anglais

TABLES FIXES POUR LE LAVAGE DU MINÉRAI.




TABLES A SECOUSSES POUR LE LAVAGE DU MINERAI.
Fig 250
Fig 251
Fig 252
0 1 2 3 4 5 6 7 8 9 10 11 12 Pieds anglais

GRILLAGE DU MINERAI.

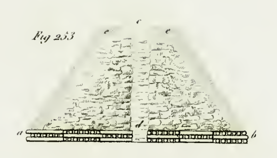


Fig 253

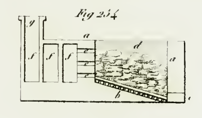


Fig 254

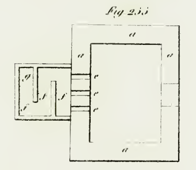


Fig 255

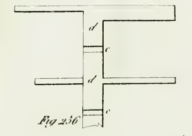


Fig 256

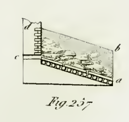
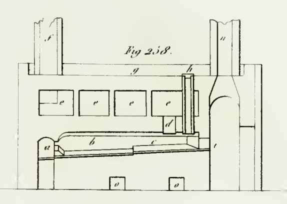
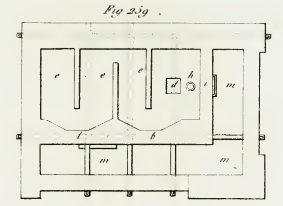


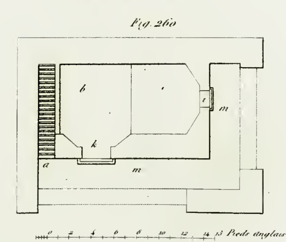
Fig. 257

0 2 4 6 8 10 12 14 16 18 20 Pieds anglais

FOURNEAU DE GRILLAGE.



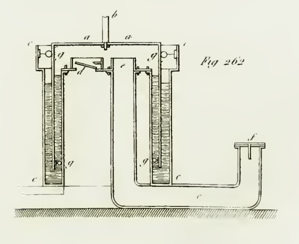




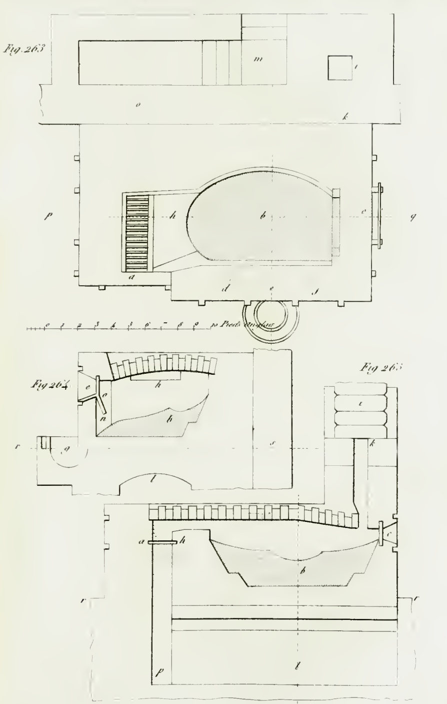
MACHINES SOUFFLANTES.

Fig. 261.

0 2 4 6 8 10 12 14 16 18 20 Pieds anglais



FOURNEAU DE FUSION POUR LE PLOMB À POULLAOUEN.



FUSION DES MINERAIS DE PLOMB.

Fig 267

Fig 266

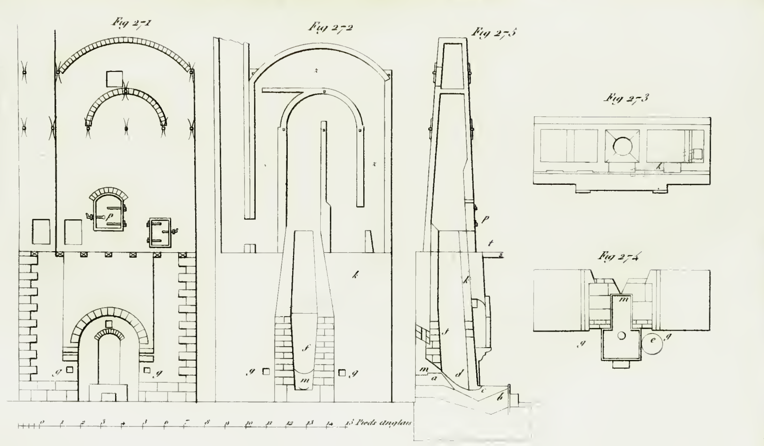


Fig 268.

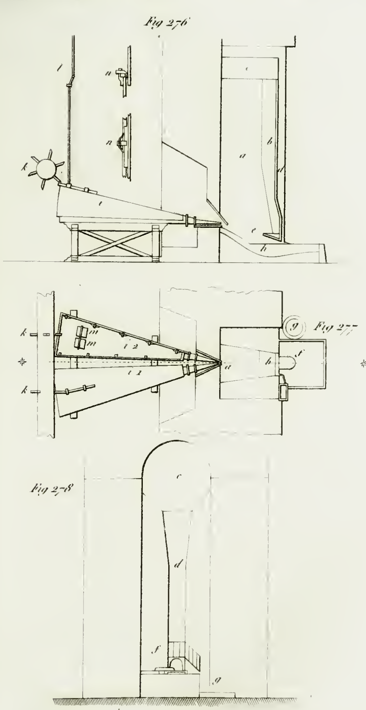
Fig 270

Fig 269.

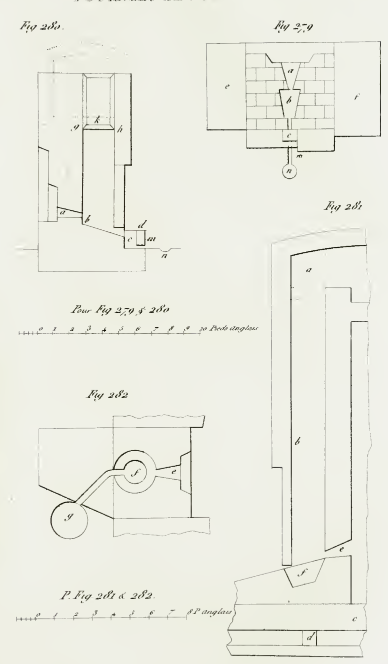
FUSION DU MINERAI DE PLOMB DANS LE HARTZ.



FOURNEAU DE GOSLAR POUR LA FUSION DES MINERAIS DE PLOMB.



FOURNEAU DE FUSION DE L'ÉTAIN.



FOURNEAU DE FUSION DU CUIVRE. FOYER D'AFFINAGE.

Fig 285.

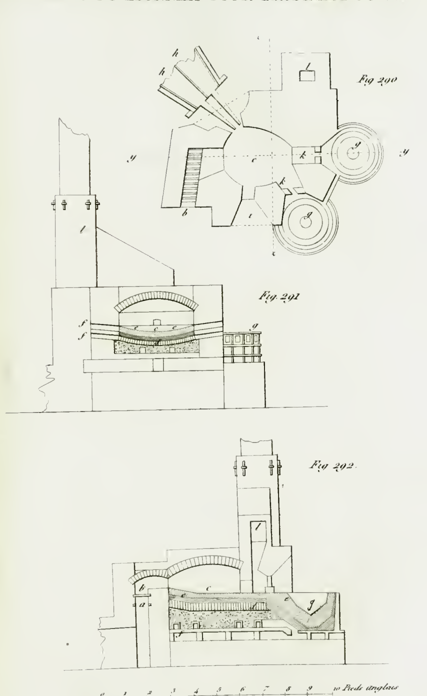
Fig 286

Fig 288

Fig 287

Fig. 289

FOURNEAU DU LYONNAIS POUR L'AFFINAGE DU CUIVRE.



HAUT FOURNEAU ALLANT AU CHARBON DE BOIS.

Fig. 293

Fig. 296

TRAITEMENT DU FER.

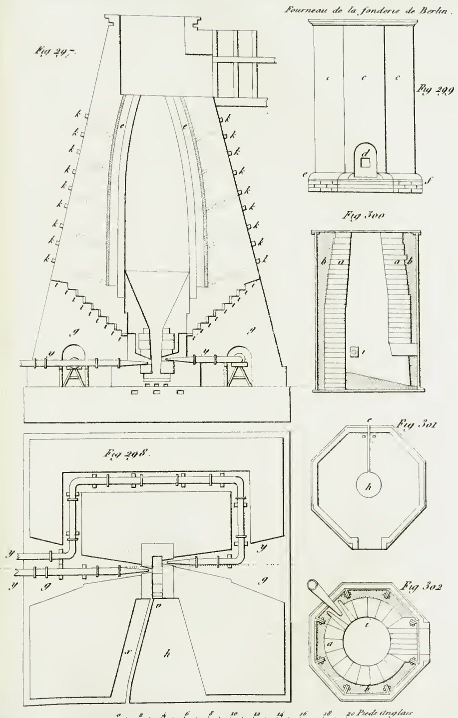
HAUT FOURNEAU ALLANT AU CHARBON DE BOIS. *Pl 85*

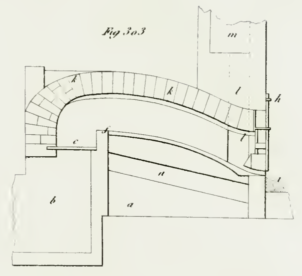
Fig 294

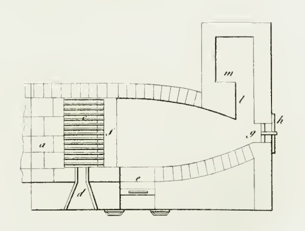
0 2 4 6 8 10 12 14 15 Pd

Fig 295

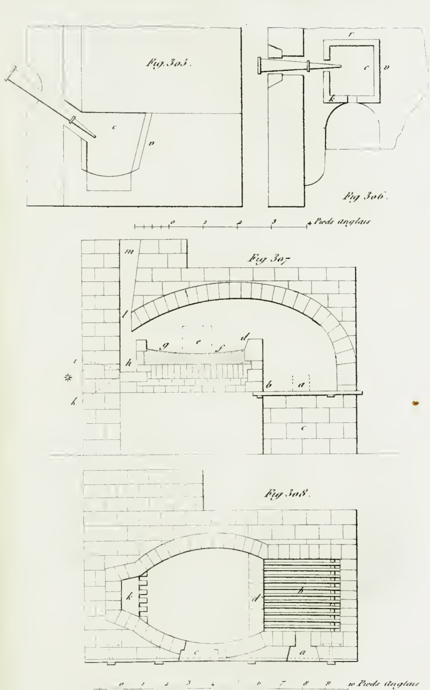
TRAITEMENT DU FER. HAUT FOURNEAU AU COKE.



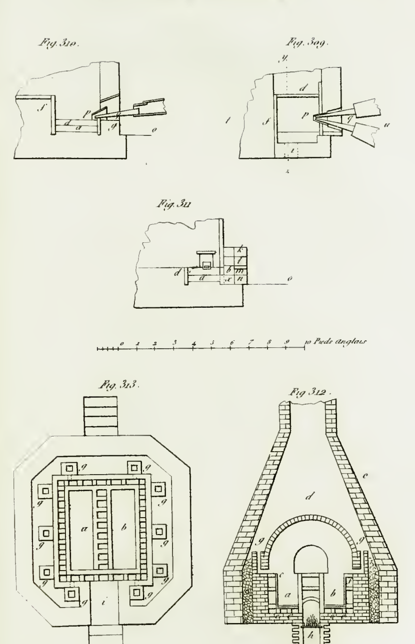

Fig. 303
m
k
k
l
h
f
c
l
a
b
a
0 2 4 6 8 10 12 14 15 Pieds Anglais

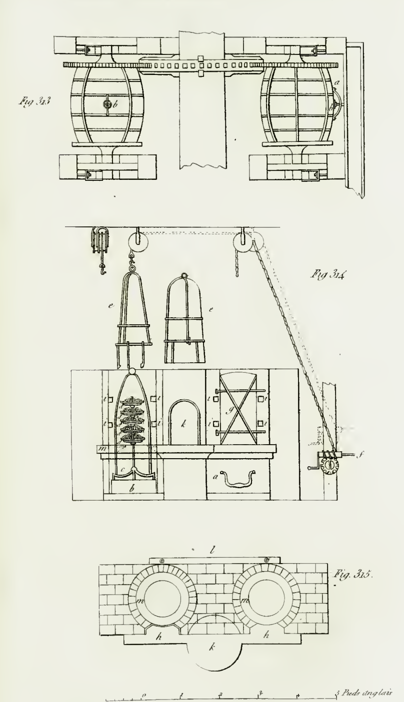

Fig. 304
m
l
h
c
f
g
a
e
d

FORGE CATALANE. FOURNEAU À RECHAUFFER.



FOURNEAUX D'ACIERIES.




Fig. 313
a
b
b
Fig. 314
e
e
i
k
g
m
c
b
a
f
l
Fig. 315.
m
m
h
h
k
0
1
2
3
4
5 Pieds anglais



COUPELLATION ET LIQUATION.

Fig. 316.

h m n c b o

Fig. 317.

h l c b k

0 2 4 6 8 10 22 P. anglais

Fig. 318.

i i l m n o

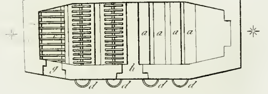
Fig. 319.

b o i o i l f d e b

Fig. 321.

c b b a a c f

Fig. 320.



0 5 10 15 Pieds anglais.

FOURNEAU POUR LA DISTILLATION DU MERCURE.

Fig. 325.

0 5 10 15 20 25 30 35 40 45 50 Pieds anglais

Fig. 326.

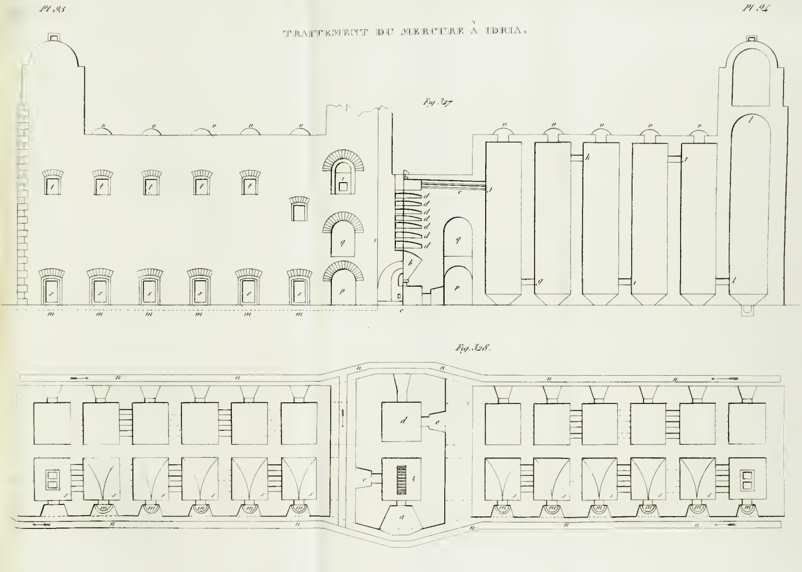
0 5 10 15 P anglais.

Fig. 322.

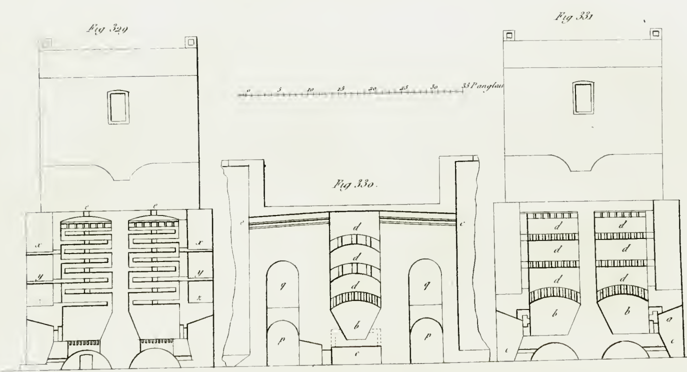
Fig. 323.

Fig. 324.

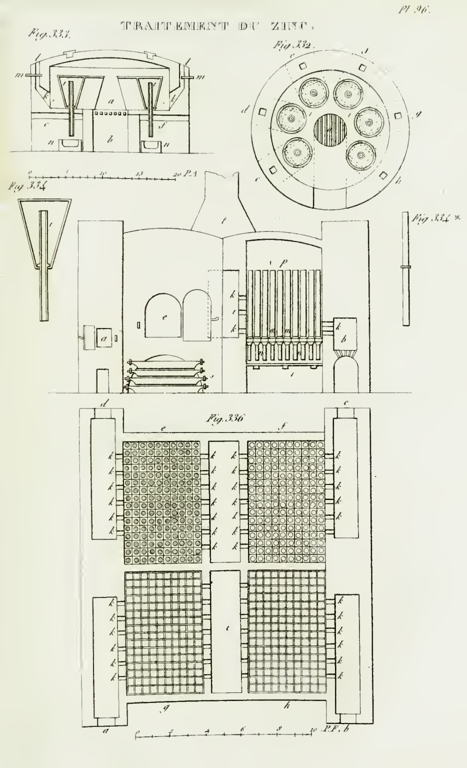
TRAITEMENT DU MERCURE À IDRIA.



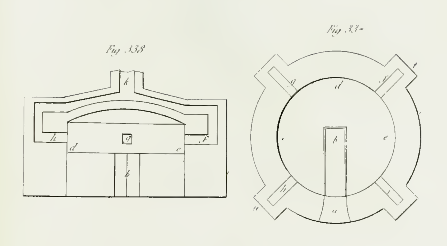
TRAITEMENT DU MERCURE À IDRIA.

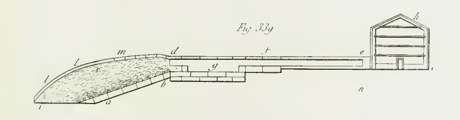


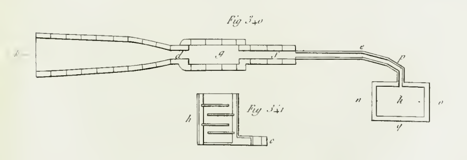
TRAITEMENT DU ZINC.

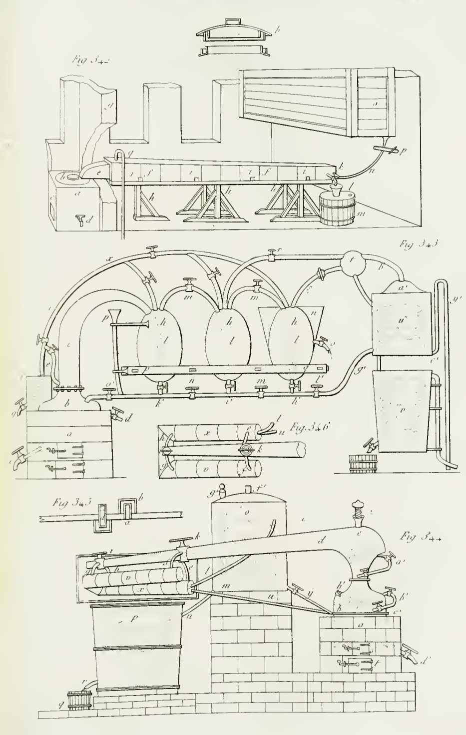


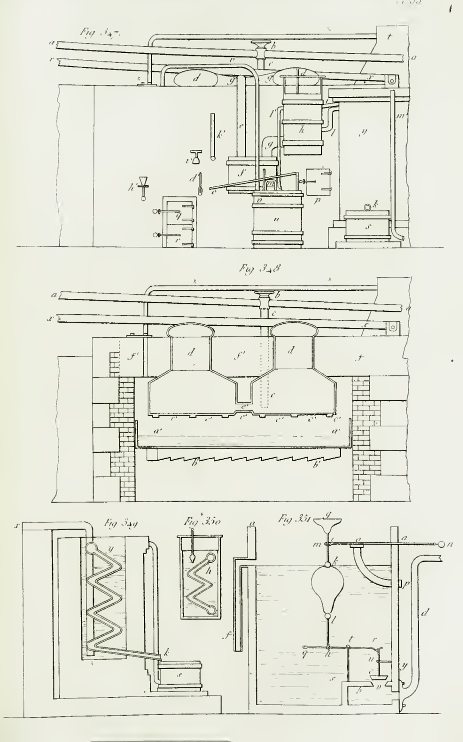
TRAITEMENT DE L'ANTIMOINE, D.º DU SOUFRE.

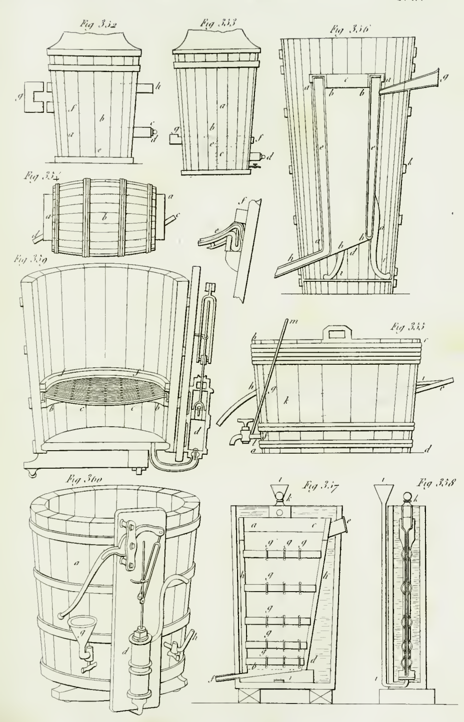


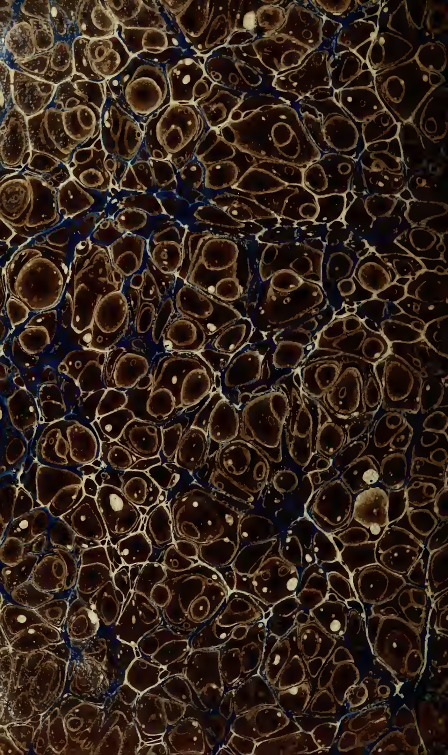


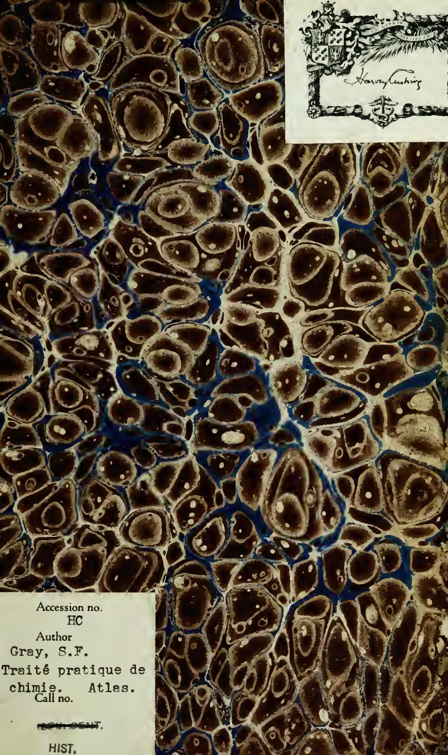



Fig. 342
Fig. 343
Fig. 346
Fig. 345
Fig. 344


Fig. 347.
Fig. 348
Fig. 349
Fig. 350
Fig. 351


Fig 352
Fig 353
Fig 356
Fig 354
Fig 359
Fig 355
Fig 360
Fig 357
Fig 358




Harvey Cushing

